PPs and DPs in Free Relatives

In a free relative construction, two distinct predicates take a single DP as their argument. Case requirements of the predicates may be the same, but under particular conditions, they can also differ. German free relatives are known to show case hierarchy effects: the construction is grammatical if the predicate of the embedded clause requires a more complex (or more oblique) case than the main clause does (cf. Vogel 2001).

If predicates require cases that are realized by PPs, certain restrictions can be observed too. (1a) and (1c) show that hierarchy effects also apply: if the predicate in the embedded clause requires the more complex case, the sentence is grammatical. In (1b) and (1d), the main clause requires the more complex case, and an interesting contrast appears: the sentence with the dative in the embedded clause is judged as much more acceptable than the one with the accusative in the embedded clause.

(1)   a. Ich vertraue [mit wem   du tanzt].
           I   trust$_{dat}$ with who$_{\text{DAT}}$ you dance$_{com}$

           'I trust who you dance with.'

       b. Ich tanze   mit [wem   du vertraust].
           I   dance$_{com}$ with who$_{\text{DAT}}$ you trust$_{dat}$

           'I dance with who you trust.'

       c. Ich gratuliere   [mit wem   du getanzt   hast].
           I   congratulate$_{acc}$ with who$_{\text{DAT}}$ you danced$_{com}$ have

           I congratulated who you danced with.'

       d. ? Ich tanze   mit [wem/wen   du gratuliert   hast].
           I   dance$_{com}$ with who$_{\text{DAT}}$/who$_{\text{ACC}}$ you congratulated$_{acc}$ have

           'I danced with who you congratulated.'   (German)

In my analysis, I follow Caha (2009) in that case features are in a containment relation:

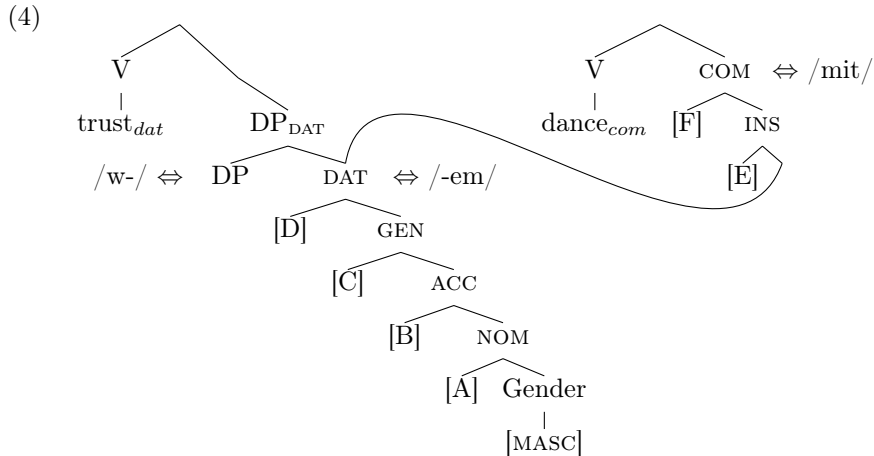(2)   [[[[[[NOM] ACC] GEN] DAT] INS] COM]

Each feature corresponds to its own terminal node in the structure (Starke 2009). Case can be expressed by either a suffix or a preposition. It is a language specific property of German that the DP only moves as high as above DAT, which means that cases until the dative are expressed as a suffix and more complex cases by a preposition (Caha 2009). The lexical entries in German for the accusative and dative suffix and the comitative preposition look as follows:

(3)   a. [[NOM] ACC] ⇔ /-en/
       b. [[[[NOM] ACC] GEN] DAT] ⇔ /-em/
       c. [[INS] COM] ⇔ /mit/

I also assume that embedded features can be remerged into different structures (i.e. grafted, Van Riemsdijk 2006). As syntax is constructed bottom-up, the embedded clause of a free relative construction is built before the main clause. Lastly, if the embedded clause is spelled out, its syntactic structure remains visible, while its spellout cannot be overwritten (cf. the Morph Integrity Hypothesis of Bermúdez-Otero 2012).

I propose that (1a) and (1c) are grammatical because the node of the required case feature is available in the syntactic structure of the embedded clause (i.e. DAT and ACC are contained in COM). That is, for (1a), *tanzt* 'dance' merges with COM, *mit wem* 'with who$_{\text{DAT}}$' is inserted (see (3b) and (3c)), and *vertraue* 'trust' merges with DAT, which is contained in COM.

The derivation for (1b) is shown in (4). The case nodes up to DAT are available in the embedded clause, as DAT is merged with *vertraust* 'trust'. The free relative pronoun up to DAT is spelled out as *wem* 'who$_{\text{DAT}}$' (see (3b)). For the main clause, COM is required by *tanze* 'dance' and additional structure is added. These case features can be spelled out without changing the spellout of the free relative pronoun: the features are spelled out by a preposition (see (3c)).

(4)

V
trust$_{dat}$ DP$_{DAT}$

V
dance$_{com}$ COM ⇔ /mit/
[F] INS
[E]

/w-/ ⇔ DP DAT ⇔ /-em/
[D] GEN
[C] ACC
[B] NOM
[A] Gender
[MASC]

For (1d), only the cases up to ACC are available in the embedded clause, as they are merged with *gratuliert* 'congratulated'. The free relative pronoun up to ACC is spelled out as *wen* 'who$_{ACC}$' (see (3a)). For the main clause, COM is required by *tanze* 'dance' and additional structure is added. To realize the case features up to COM in the main clause, the features [[[[GEN] DAT] INS] COM] need to be spelled out. [[INS] COM] can be spelled out by the preposition (see (3c)). However, to spell out [[GEN] DAT], the spellout of the free relative has to be changed: *-en* has to be replaced by *-em* (see (3a) and (3b)). As I assume that while the syntactic structure of the embedded clause remains visible, its spellout cannot be overwritten, the derivation crashes at this point, causing the observed reduced grammaticality.

This analysis predicts that a sentence as (1d) is grammatical in a language in which accusative is the most complex case that expressed as a suffix. The crucial difference between this language and German will be the case features that are contained in the lexical entry for the preposition. Such a language is Dutch: it has the language specific property that the DP only moves as high as above ACC, and nominative and accusative are expressed as suffixes and more complex cases are expressed by a preposition. The lexical entries in Dutch for the accusative free relative suffix and the comitative preposition look as follows:

(5)   a. [[NOM] ACC] ⇔ /-ie/
      b. [[[[GEN] DAT] INS] COM] ⇔ /met/

(6) shows this prediction is borne out: the Dutch counterpart of (1d) is grammatical.

(6)   Ik dans   met [wie   jij gefeliciteerd   hebt].
      I dance$_{com}$ with who$_{NOM/ACC}$ you congratulated$_{acc}$ have

      'I danced with who you congratulated.'   (Dutch)

In a derivation, the case nodes up to ACC are available in the embedded clause, as they are merged with *gefeliciteerd* 'congratulated'. The free relative pronoun up to ACC is spelled out as *wie* 'who$_{ACC}$' (see (5a)). For the main clause, COM is required by *dans* 'dance' and additional structure is added. These case features can be spelled out without changing the spellout of the free relative pronoun: the features are spelled out by a preposition (see (5b)).

References

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